# 2008 TECHNICAL TRAINING COURSE DESCRIPTIONS State of Iowa Bureau of Weatherization

Note: Except where otherwise noted, these training courses are approved **only** for local agency personnel. Although most of the courses are for evaluators/inspectors, crew workers may attend evaluator/inspector courses.

## **Required Courses for Evaluators/Inspectors**

#### Basic Evaluator/Inspector:

This 3-day course is a combination of classroom and in-field training. The course is designed for new evaluators/inspectors, but may also be used as a refresher for other evaluators/inspectors. The course will cover the basics of how to conduct a weatherization evaluation of a house, including an energy audit and a health and safety assessment. Topics included in the training are: the equipment used in an evaluation, residential construction details, energy principles, and the various steps involved in the evaluation. Participants will learn how to use the blower door, pressure gauges, and the TI-86 calculator. Participants will also learn how to conduct basic combustion health and safety assessments, how to do refrigeration appliance replacement assessments, and how to conduct duct leakage testing. The course will also offer an overview of some basic program issues, such as work deferral issues, client selection and client priority.

## **Basic Furnace Diagnostics:**

This 2-day course is a combination of classroom and furnace lab training. Participants will learn about furnace components, basic electric, venting, and gas pressure issues. Participants will learn the basics of furnace and ductwork sizing and how to use combustion appliance testing equipment.

#### Advanced Blower Door/Zonal Pressure Diagnostics:

This 2-day course is a combination of classroom and in-field training. Participants will learn how to use the blower door, DG-700, and TI-86 to determine building tightness limits, baseline, aligning thermal and pressure boundaries, and zonal pressure testing (garage testing). Participants must have a working knowledge of the blower door. Participants need to bring a TI-86 calculator and a DG-700 (if available) to the training.

#### **Combustion Health and Safety:**

This 2-day course is a combination of classroom and in-field training. Participants will learn to set up a house in worst-case conditions, and perform required draft and carbon monoxide testing for furnaces and water heaters using a digital monometer, monoxer, and TI-86 calculator. There will be discussion of test results and possible solutions. Participants will also learn steady state efficiency testing using a combustion analyzer and will learn how to calculate the Depressurization Tightness Limit (DTL).

# Mold/Moisture/Ventilation/BTL:

This 2-day course is a combination of classroom and in-field training. (Note: Participants must have a working knowledge of the blower door.) Participants will learn what causes moisture and mold problems, how to conduct a mold/moisture assessment, including recognizing "red flags', and how to determine the various building tightness limits (BTL, BTLa, DTL, and OTL). Training will also cover moisture control strategies, including ventilation issues. Participants will use a digital monometer and TI-86 calculator to test pressure differential caused by mechanical ventilation. Participants need to bring a TI-86 calculator to the training.

#### **NEAT Audit/NEATShell/Appliance Metering Training:**

This 1½ day course is a combination of classroom and in-field training. Participants will learn how to maneuver through the audit, how to complete the parameter setups, and how to input data in the audit. The use of NEATShell and how it works with NEAT Audit will also be demonstrated.

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Participants will collect necessary information for audit input, complete an audit on a house and learn how to interpret audit output reports. Participants will also learn how to meter refrigeration appliances and determine if they can be replaced with more energy efficient appliances.

#### MHEA Audit:

This 2-day course is a combination of classroom and in-field training. Participants will learn how to maneuver through the audit, how to complete the parameter setups, and how to input data in the audit. Participants will collect necessary information for audit input and complete an audit on a house. Finally, participants will learn how to interpret audit output reports.

## Required Courses for Evaluators/Inspectors, Crews and Contractors

### **Slate Siding Safe Work Practices:**

This is a 1-day classroom course. Participants will learn the potential health hazards of asbestos and will learn the safe work practices involved in removing and reinstalling slate siding. (All evaluators/ inspectors must take this training because they must determine when workers must adhere to safe work precautions. In addition, all contractors and crewmembers must complete the training within one year of hire.) *Note: This training may be obtained from sources other than DCAA*.

#### **Lead Safe Work Practices:**

This is a 1-day course that uses the training curriculum and materials developed and used by the lowa Department of Public Health in its lead paint safe-work practices training. Participants will learn the potential health hazards of lead paint dust and will learn safe work practices involving lead paint. Participants successfully completing this course meet the performance standard of HUD's Lead Paint Regulation 24CFR Part 1330(a)(4). (All evaluators/ inspectors must take this training because they must determine when workers must adhere to safe work precautions. In addition, all contractors and crewmembers must complete the training within one year of hire.) Note: This training may be obtained from sources other than DCAA.

## Recommended Courses for Evaluators/Inspectors

# **Advanced Furnace**

This 2-day course is a combination of classroom and furnace lab training and is a follow up to the Basic Furnace Diagnostics course. Participants must have a working knowledge of furnaces. Participants will learn about condensing furnaces, boilers, heat pumps, and air conditioners.

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